

REMARKS

Attached hereto is a marked up version of the changes made in the specification and claims by the current amendment. The attached page is captioned "**Version with markings to show changes made.**"

Claims 1- 21 and 23 - 25 are all of the claims pending in the present Application. Claim 22 is canceled. Previously-canceled claim 15 is re-instated as new claim 25. This claim was previously canceled to expedite prosecution because the Examiner objected that no figure showed the loop-type feeding probe. The proposed drawing corrections showing such loop-type feeding probe has been approved by the Examiner, so Applicants request re-instatement of claim 15.

The rejection on record is inconsistent in its identification of which claims are rejected. In a telephone call to the Examiner dated May 16, 2002, the Examiner clarified that the cover page lists the correct claim status. Therefore, claims 6-14, 16, 21, 23, and 24 are understood as allowed and claims 1-5, 17-20, and 22 are understood as rejected.

With the above understanding, claim 1 stands rejected under 35 USC §102 (b) as anticipated by Japanese Patent JP-09-148810 to Ishitobi, and claims 2-5 and 17-20 stand rejected under 35 USC §103(a) as unpatentable over Ishitobi. Claim 22 stands rejected under 35 USC §112, first paragraph, as introducing new matter and under 35 USC §103(a) as unpatentable over Ishitobi. The cancellation of claim 22 renders this rejection moot.

These rejections are respectfully traversed in view of the following discussion.

Entry of this Amendment is proper under 37 CFR §1.116 since no new issues are introduced by the claim amendments and that the argument herein clarifies the issues for appeal.

It is noted that the claims have been amended solely to more particularly point out the present invention for the Examiner, and not for distinguishing over the prior art or for statutory requirements directed to patentability. It is further noted that, notwithstanding any claim amendments made herein, Applicants' intent is to encompass equivalents of all claim elements, even if amended herein or later during prosecution.

I. THE CLAIMED INVENTION

The inventive dielectric resonator (10) includes three surfaces formed by chamfering three ridged portions sharing an apex of a dielectric block and another three surfaces adjacent respectively thereto, in which each of the chamfered surfaces and the adjacent surfaces thereto offers an angle of 45 degrees and an area ratio of the chamfered surfaces with respect to the adjacent surfaces is 45%. The dielectric resonator is mounted in a cut-off waveguide and of a generally rectangular parallelepiped (21) and feeding probe (24) and (25) are provided for comprising a dielectric filter. The present invention has a number of advantages over the conventional art, including a feature that the various modes are simultaneously coupled.

II. THE PRIOR ART REJECTION

The Examiner maintains the rejection based on a belief that JP-09-148810 to Ishitobi meets all of the limitations of claim 1 and that claims 2-5 and 17-20 would have been "obvious". Applicants again respectfully traverse this assessment by pointing out that Ishitobi itself describes that the three modes are not coupled (see paragraph 0016):

"In this example, the combination between resonance modes is equivalent to coupling coefficients K_{12} , K_{23} , and K_{31} . Since a means to combine the first resonance mode and third resonance mode in the example is **not established**, it is $K_{31} = 0$."

Hence, turning to the clear language of the claims, relative to claim 1, there is no

teaching or suggestion of " ... wherein at least two edges of said dielectric block are chamfered in a manner to provide a coupling of three resonant modes of said dielectric block", as required by the claim.

For this reason, the claimed invention is fully patentable over the cited references.

Further, the other prior art of record has been reviewed, but it too even in combination with Ishitobi fails to teach or suggest the claimed invention.

IV. Formal matters and Conclusion

In view of the foregoing, Applicant submits that claims 1 - 21 and 23 - 25, all the claims presently pending in the application, are patentably distinct over the prior art of record and are in condition for allowance. The Examiner is respectfully requested to pass the above application to issue at the earliest possible time.

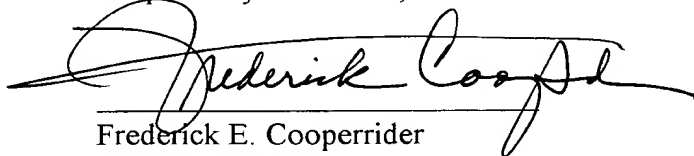
Should the Examiner find the application to be other than in condition for allowance, the Examiner is requested to contact the undersigned at the local telephone number listed below to discuss any other changes deemed necessary in a telephonic or personal interview.

The Commissioner is hereby authorized to charge any deficiency in fees or to credit any overpayment in fees to Attorney's Deposit Account No. 50-0481.

Date: _____

8/6/02

Respectfully Submitted,



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VERSION WITH MARKINGS TO SHOW CHANGES MADE

IN THE CLAIMS:

Claim 22 has been canceled above.

Claim 1 has been amended as follows:

1. (Amended) A dielectric resonator comprising:
a dielectric block having a generally rectangular parallelepiped shape, wherein at least two edges of said dielectric block are chamfered in a manner to provide a coupling of three resonant modes of said dielectric block [are coupled, wherein said dielectric resonator has a first plane formed by chamfering a single one of a ridge portion of said dielectric block and a second plane formed by chamfering a single one of a second ridge portion of said dielectric block, said first chamfered ridge not being parallel to said second ridge portion].

New claim 25 has been added:

25. (New) A dielectric filter described by claim 6, further comprising:
a feeding probe, wherein said feeding probe is loop-type.